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ABSTRACT

This report describes the uses of visual literacy programs in the schools and outlines four categories for incorporating training in visual thinking into school curriculums as part of the back to basics movement in education. The report recommends that curriculum writers include materials pertaining to: (1) reading visual language and understanding visual elements, (2) controlling our lives through images, (3) creating and designing visual information, and (4) thinking visually. Examples of how each of these given areas can be incorporated into a curriculum are given, as are techniques for teachers to provide this approach in their classrooms. Thirty-five references are listed. (Author/MER)

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A Prospective Curriculum Using Visual Literacy

by

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Running head: Visual Literacy

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The back to the basics movement in education has been a threat to many areas of the curriculum: art, music, drama, physical education, media, vocational education, and advanced programs or methods in most of the disciplines. However, defining what "back to the basics" means depends on who is doing the defining. Some people advocate a return to the days of the one-room country schoolhouse or even to the Grecian Age for a good example of appropriate curriculum in the basics. If we go back to the Greeks, we could use the ideas of Plato who warned teachers about using certain stories and images and advocated censorship but was also in favor of physical education (gymnastics) and music (Ulich, 1950, p. 17). Today, a good case could be made that we are already using methods copied from the days of the one-room country schoolhouse with programs of individualized instruction, self-directed study and peer teaching. Older students used to help the local schoolmaster with the younger students, and students worked a lot at their own pace. This paper does not condemn or support either type of example for back to the basics, but these two are mentioned only to point out that there are inconsistencies in what constitutes a back to the basic curriculum.

Traditionally, reading, writing, and arithmetic have been considered the basics, but are these an adequate set of basic skills for preparing children and adolescents in our highly technological and visual society? The power and pervasiveness of visual communication in our society should not be underestimated. Today, there is a great

need for skills to understand, judge and create visual information with intelligence. Television is one form of visual communication that is certainly pervasive if not powerful. Moody (1980) reported that the typical American family has a television turned on for six and a half hours a day. Teachers, principals and curriculum specialists are dealing with students who have never known a world without television and the long-range effects of television, physiological and psychological, obviously deserve study. It is already evident that over-stimulation in our society produces stress that has been measured in terms of electrical activity of the brain and other physiological changes, such as heart rate, blood pressure, hormone secretion and stress-related diseases (Moody, 1980, p. 12). What was basic for the students of years ago will not suffice today.

Therefore, if we are to move toward the basics, let us not go backward but rather forward to teaching skills that are relevant, challenging and critical for preparing students in a highly visual, technological society. There is a greater need for visual awareness, skill and sensitivity if we are to understand the manipulation and influence of television, film, advertisements, graphic arts, magazines and newspapers. As the result of vast technological changes in telecommunications and the increasing use of the microcomputer, our appreciation, understanding and use of graphs, charts, maps, diagrams, pictures, and commercial art work depends on our visual intelligence.

I propose that visual literacy is one kind of basic skill that should be taught in the schools along with reading, writing and arithmetic. Visual literacy is the ability to understand and use images and to think and learn in terms of images (Hortin, 1980, p. 218). There is no doubt that reading, writing and arithmetic are thinking processes, but learning to see or visualize is also learning to think. Effective education means that we are able to teach students to discriminate, understand, criticize, question, and classify the visual messages as well as the verbal messages: we and they must become visually literate.

Visual literacy includes three basic principles: (1) visuals are a language and thus analogous to verbal language, hence the term visual literacy; (2) a visually literate person should be able to understand (read) images and use (write) visual language (Ausburn & Ausburn, 1978, p. 291); (3) a visually literate person should be able to process information visually in order to think visually (Arnheim, 1966, 1969; Bry, 1978; Bruner, 1962; Lorayne & Lucas, 1974; McKim, 1972; Paivio, 1969, 1971, 1975; Nelms, 1964; Wileman, 1980).

Emphasis in our schools in the past has been on verbal thinking with constant exposure to the spoken and written word. Reading and writing have always had dominance in our schools regardless of the disciplines that were offered, and verbalization is a skill that should continue to dominate as a mode of communication and learning. However, verbalization (reading, speaking or writing) is not the only mode

through which we learn. Kepes (1964) wrote that "visual language is capable of disseminating knowledge more effectively than almost any other vehicle of communication" (p. 13).

In order to help the reader gain a clearer idea of what a visual literacy program in the curriculum includes, I will provide an outline of four possible categories:

1. reading visual language and understanding visual elements
2. how images communicate and control our lives
3. creating and designing visual information
4. visual thinking

Many of these examples could be incorporated into the present curriculum and by no means should the categories presented here be considered finite or separate from one another.

First of all, students in a visual literacy program are taught to "read" visual language and understand visual elements. This means an appreciation and knowledge of line, shape, size, composition, dimension, balance, stress, color, texture, scale and movement. Magazine advertisements, television commercials, commercial designs, classic art drawings and paintings, charts, graphs, illustrations, and symbol systems (pictorial, graphic, dynamic, static) would be analyzed, critiqued and studied. Information about how we see (perceptual skills) and how we can illustrate ideas (creative skills) is explored using the basic elements of visual language.

Secondly, visual literacy includes the understanding of how visuals (images) communicate, influence, manipulate and control our lives. Students learn how to deal with mass media and control their own viewing habits and how images can help us learn. Books, such as De Franco's (1980) TV On/Off, Arlen's (1974) The View from Highway 1, Winn's (1977) The Plug-In Drug, Newcomb's (1979) Television: The Critical View, Arlen's (1979) Thirty Seconds, Mander's (1977) Four Arguments for the Elimination Of Television, and Moody's (1980) Growing Up on Television are excellent for use in this category.

Creating and designing visual information is another important aspect of a visual literacy program. Children and adolescents could have experiences in filmmaking, television production, overhead transparency presentations, slide/tape programs, drawing, painting, modeling, scriptwriting, storyboarding, sketching, and photography. Students would learn how to create visual information and how to use that information effectively. For example, students could be asked to choose a particular idea and design representations of that idea with the following eight levels on a concrete-to-abstract continuum: (1) 3-D model; (2) photograph; (3) illustration/drawing; (4) image-related graphic; (5) concept-related graphic; (6) arbitrary graphic; (7) definition (description); (8) noun label (Wileman, 1980, p. 28). I have had success at teaching students television production techniques by asking them to produce a satire of their favorite television commercial with our school's video system.

Finally, the most important category for a visual literacy program is in the area of mental imagery or visual thinking. An outstanding program that utilizes this aspect is the Visual Curriculum Project, sponsored by the South Australian Education Department and Salisbury College under the direction of Dean Hutton (Hutton, 1978, 1979; Curriculum Development Centre, 1980). In this program students are first taught memory techniques through visualization to help them remember speeches, ideas, words, physical skills, field trips, people, demonstrations and procedures. Students are shown how to develop mental imagery through exercises such as visual associations, mnemonics, creating and forming images, learning how to see detail, and visualizing future and past experiences. Students can be shown a series of pictures cut out of magazines and then asked to identify the new ones that have been added to the series the second time around. Another activity might be to ask the student to remember and recreate details from a picture that was given to a student and then removed from the student's view. Mental imagery can be used for developing physical skills, problem solving, creative writing, planning works of art, improving decision making and studying visual metaphors, visual puzzles and illusions.

Researchers and writers such as Paivio (1969, 1971), Patten (1973), Lorayne and Lucas (1974), Luria (1968), and Loftus (1980) have demonstrated the use of imagery as aiding to memory and facilitating learning. Lorayne and Lucas (1974) wrote about the early Greek

and Roman orators and how they applied memory systems to deliver their lengthy speeches:

> What they did, basically, was associate each thought of a speech to a part of their own homes. These were called 'loci,' or 'places.' The opening thought of a speech would, perhaps, be associated to the front door, the second thought to the foyer, the third to a piece of furniture in the foyer, and so on. When the orator wanted to remember his speech, thought for thought, he actually took a mental tour through is home. Thinking of the front door reminded him of the first thought of his speech. It is from this 'place,' or 'loci' memory technique that we get the time-worn phrase 'in the first place.' (pp. 1-2)

Fleming (1977) described more mnemonic strategy:

> For example, in controlled studies, subjects have been asked to recall arbitrary clusters of words such as: house, knife, rock, flower, elephant, apple. If directed to form a composite interactive image of these objects a subject might, for example, imagine an elephant lifting a house over his head with a rock falling from the foundation, one tusk shaped like a knife and impaling an apple, a basket of flowers held by his tail. (p. 45)

Bower (1972) found that subjects directed to form composite images, such as those above, frequently recall twice as many words as those subjects who rehearse the words in the traditional drill fashion.

Imagery has also been used in medicine. Practitioners such as Bry (1978) have used an image technique in therapy sessions. In Bry's book, Visualization: Directing the Movies of Your Mind, she explained, "Through our movies-of-the-mind, however, we can create a state of awareness in which we are not thinking about, or figuring out, or analyzing our experiences, but actually experiencing them directly" (p. 6).

Another practitioner, Gendlin (1978) at the University of Chicago, practiced a similar technique with what he described as "focusing." In his book, Focusing, Gendlin (1978) described how a person can strip away verbalizations, analyses and tension by focusing toward greater awareness through bodily awareness, imagery and feeling. The subject knows when a deeper awareness level is reached because there is a release of tension or what Gendlin called a "body shift" (p. 26).

Samuels and Samuels (1975) wrote that visualization has been used for spiritual goals, materialistic goals, mental health and healing (p. 30). Bry (1978) described the use of visualization by Dr. Gerald Jampolsky for treating problems ranging from learning disabilities to leukemia (p. 86). Also, Carl Simonton and Stephanie Simonton used visualization along with traditional therapy on cancer

patients (Bry, 1978, pp. 68-69). Bry (1978) wrote:

> As doctors and others now know from the science of biofeedback, the rate of our heartbeat and other body functions can be altered by changing what we are feeling and thinking. And as students of the mind are rediscovering from the writings of artists and scientists throughout history, solutions to seemingly insoluble problems can be found by turning in to our inner images. (p. 7)

The viewer retains an image and uses it to create meaning, that is, he thinks visually. Many educators see film study as an area particularly suitable for understanding imagery and visualization. Woodruff (1976) elaborated on the image element: "The viewer goes through a process of re-editing the film in her/his own mind. Memorable images are 'spliced' together, the sum of which becomes an individual meaning for the film" (p. 66).

Obviously, applying visual literacy to other areas in the curriculum is important. The teaching of reading through the language experience is one example (Hall, 1981). Using visual literacy in the sciences is particularly appealing, helping students to learn to identify, distinguish, classify, and sketch specimens, microscopic organisms and animals. Creating mental images for solving mathematics problems is another example. In industrial arts students could mentally practice the procedures and steps before they actually perform

the task. Mentally rehearsing and picturing oneself in a role for a school play, a speech or a presentation is another way of using visual literacy techniques.

All of the above examples and categories have dealt with visual literacy as a practical concern for the educator. Increased visual literacy helps in the understanding of all types of information. Visual intelligence means increased awareness, appreciation, insight and enrichment. It should be possible to bridge the gap between the imagery generated by our technological and visual society and the concerns of educators who hope to prepare students to deal with that society. Dondis (1973) wrote about the promise of visual literacy, "It is not only a necessity but, happily, a promise of human enrichment in the future" (p. 185).

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